WHAT IS CLAIMED IS:

CLAIM 1. A method for producing cranial remodeling devices to correct for cranial shape abnormalities comprising:

capturing a three dimensional digital image of a deformed head to produce first digital data; and

utilizing said first digital data to automatically provide cranial remodeling device information for use in fabricating a cranial remodeling device for said deformed head.

CLAIM 2. A method in accordance with claim 1, wherein:

said cranial remodeling device information comprises identification of one of a plurality of types of cranial remodeling devices.

CLAIM 3. A method in accordance with claim 2, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific types of cranial deformities.

CLAIM 4. A method in accordance with claim 3, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly, brachycephaly, and scaphocephaly.

CLAIM 5. A method in accordance with claim 3, wherein:

said cranial remodeling device information comprises predetermined

configuration features that may be incorporated in said cranial remodeling device.

CLAIM 6.   A method in accordance with claim 5, wherein:

said predetermined configuration features comprise predetermined design

features.

CLAIM 7.   A method in accordance with claim 6, wherein:

said predetermined design features are selected from a group comprising a right

anterior corner, a left anterior corner, a right posterior corner, a left posterior corner, a

fractional posterior cap, a fractional anterior cap and a lengthwise strut across top of

band.

CLAIM 8.   A method in accordance with claim 1, wherein:

said cranial remodeling device information comprises a style information selected

from a group comprising a right side opening cranial remodeling band, a wide right side

opening cranial remodeling band, a left side opening cranial remodeling band, and a

wide left side opening cranial remodeling band.

CLAIM 9.   A method in accordance with claim 1, comprising:

utilizing said first data to automatically produce a physical model; and

utilizing said physical model and said cranial remodeling device information to

produce said cranial remodeling device.

CLAIM 10. A method for producing cranial remodeling devices to correct for cranial shape abnormalities comprising:

capturing a three dimensional, substantially global digital image of a deformed head to produce first digital data; and

utilizing one or more neural networks operating on said first digital data to automatically provide cranial remodeling device information for use in fabricating a cranial remodeling device for said deformed head.

CLAIM 11. A method in accordance with claim 10, wherein:

said cranial remodeling device information comprises identification of one of a plurality of types of cranial remodeling devices.

CLAIM 12. A method in accordance with claim 11, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific types of cranial deformities.

CLAIM 13 A method in accordance with claim 12, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly, brachycephaly, and scaphocephaly.

CLAIM 14. A method in accordance with claim 12, wherein:

said cranial remodeling device information comprises predetermined design features to be incorporated in said cranial remodeling device.

CLAIM 15.   A method in accordance with claim 14, wherein:

said predetermined design features comprise standardized structural configurations.

CLAIM 16.   A method in accordance with claim 15, wherein:

said standardized structural configurations are selected from a group comprising a right anterior corner, a left anterior corner, a right posterior corner, a left posterior corner, a fractional anterior cap, a fractional posterior cap, and a lengthwise strut across top of band.

CLAIM 17.   A method in accordance with claim 10, wherein:

said cranial remodeling device information comprises a device style selected from a group comprising a right side opening cranial remodeling band, a wide right side opening cranial remodeling band, a left side opening cranial remodeling band, and a wide left side opening cranial remodeling band.

CLAIM 18.   A method in accordance with claim 10, comprising:

utilizing said first data to automatically produce a physical model of a modified head shape; and

utilizing said physical model of said head and said cranial remodeling device

information to produce said cranial remodeling device.

CLAIM 19. A method for producing a cranial remodeling device to correct for a cranial shape abnormality, comprising:

capturing a digital image of a deformed head to produce first digital data;

automatically processing said first digital data to produce second data corresponding to a desired shape for use in forming a cranial remodeling device; and

automatically providing cranial remodeling device information for use in fabricating a cranial remodeling device for said deformed head.

CLAIM 20. A method in accordance with claim 19, wherein:

said cranial remodeling device information comprises identification of one of a plurality of types of cranial remodeling devices.

CLAIM 21. A method in accordance with claim 20, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific types of cranial deformities.

CLAIM 22. A method in accordance with claim 21, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly, brachycephaly, and scaphocephaly.

CLAIM 23. A method in accordance with claim 21, wherein:

said cranial remodeling device information comprises predetermined design

features that are selectable for inclusion in said cranial remodeling device.

CLAIM 24. A method in accordance with claim 23, wherein:

said predetermined design features comprise standardized structural

configurations.

CLAIM 25. A method in accordance with claim 24, wherein:

said standardized structural configurations are selected from a group comprising

two or more of a right anterior corner, a left anterior corner, a right posterior corner, a left

posterior corner, a fractional anterior cap, a fractional posterior cap, and a lengthwise

strut across top of band.

CLAIM 26. A method in accordance with claim 19, wherein:

said cranial remodeling device information is automatically selected from a group

comprising a right side opening cranial remodeling band, a wide right side opening

cranial remodeling band, a left side opening cranial remodeling band, and a wide left

side opening cranial remodeling band.

CLAIM 27. A method in accordance with claim 19, comprising:

utilizing said second data to automatically produce a physical model of said

desired shape; and

utilizing said physical model and said cranial remodeling device information to produce said cranial remodeling device.

CLAIM 28.   A method in accordance with claim 19, comprising:

utilizing said second data to automatically produce said cranial remodeling device.

CLAIM 29.   A system for producing cranial remodeling devices to correct for cranial shape abnormalities comprising:

a digitizer operable to capture three dimensional digital image data of a deformed head to produce first digital data;

a computer;

computer programs operable on said computer such that said computer processes said first digital data to automatically provide cranial remodeling device information for use in fabricating a cranial remodeling device for said deformed head.

CLAIM 30.   A system in accordance with claim 29, wherein:

said cranial remodeling device information comprises identification of one of a plurality of types of cranial remodeling devices.

CLAIM 31.   A system in accordance with claim 30, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific types of cranial deformities.

CLAIM 32.   A system in accordance with claim 31, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly,

brachycephaly, and scaphocephaly.

CLAIM 33.   A system in accordance with claim 31, wherein:

said cranial remodeling device information comprises predetermined design

features that may be incorporated in said cranial remodeling device.

CLAIM 34.   A system in accordance with claim 33, wherein:

said predetermined design features comprise standardized structural

configurations.

CLAIM 35.   A system in accordance with claim 34, wherein:

said standardized structural configurations are selected from a group comprising

one or more of a right anterior corner, a left anterior corner, a right posterior corner, a left

posterior corner, a fractional anterior cap, a fractional posterior cap, and a lengthwise

strut across top of band.

CLAIM 36.   A system in accordance with claim 34, wherein:

said cranial remodeling device information comprises a selection from a group

comprising one or more of a right side opening cranial remodeling band, a wide right side

opening cranial remodeling band, a left side opening cranial remodeling band, and a

wide left side opening cranial remodeling band.

CLAIM 37.   A system in accordance with claim 29, comprising:

said computer utilizing said first data to automatically produce a physical model from which said cranial remodeling device is produced.

CLAIM 38.   A system for producing cranial remodeling devices to correct for cranial shape abnormalities comprising:

a digitizer operable to capture a digital image of a head to produce first digital data; and

a computer;

one or more neural networks operable on said computer and responsive to said first digital data to automatically provide cranial remodeling device information for use in fabricating a cranial remodeling device for said head.

CLAIM 39.   A system in accordance with claim 38, wherein:

said cranial remodeling device information comprises identification of one of a plurality of types of cranial remodeling devices.

CLAIM 40.   A system in accordance with claim 39, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific predetermined types of cranial deformities.

CLAIM 41   A system in accordance with claim 40, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly,

brachycephaly, and scaphocephaly.

CLAIM 42.   A system in accordance with claim 40, wherein:

said cranial remodeling device information comprises predetermined design

features that may be incorporated in said cranial remodeling device.

CLAIM 43.   A system in accordance with claim 42, wherein:

said predetermined design features comprise structural configurations.

CLAIM 44.   A system in accordance with claim 43, wherein:

said structural configurations are selected from a group comprising one or more of

a right anterior corner, a left anterior corner, a right posterior corner, a left posterior

corner, a fractional anterior cap, a fractional posterior cap, and a lengthwise strut across

top of band.

CLAIM 45.   A system in accordance with claim 38, wherein:

said cranial remodeling device information includes selection of a cranial

remodeling device style selected from a group comprising a right side opening cranial

remodeling band, a wide right side opening cranial remodeling band, a left side opening

cranial remodeling band, and a wide left side opening cranial remodeling band.

CLAIM 46. A system in accordance with claim 38 comprising:

said system comprises apparatus utilizing said first data to automatically produce

a physical model from which said cranial remodeling device is fabricated.

CLAIM 47. A system for producing cranial remodeling devices to correct for cranial

shape abnormalities comprising:

a digitizer operable to capture a three dimensional digital image of a deformed

head to produce first digital data;

a computer operable to automatically process said first digital data to produce

second data corresponding to a desired shape for use in forming a cranial remodeling

device; and

said computer automatically providing cranial remodeling device information for

use in fabricating a cranial remodeling device for said deformed head.

CLAIM 48. A system in accordance with claim 47, wherein:

said configuration information comprises identification of one of a plurality of

styles of cranial remodeling devices.

CLAIM 49. A system in accordance with claim 48, wherein:

said plurality of styles of cranial remodeling devices includes devices for

treatment of specific types of cranial deformities.

CLAIM 50.   A system in accordance with claim 49, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly,

brachycephaly, and scaphocephaly.

CLAIM 51.   A system in accordance with claim 49, wherein:

said cranial remodeling device information comprises predetermined design

features that may be incorporated in said cranial remodeling device.

CLAIM 52.   A system in accordance with claim 51, wherein:

said predetermined design features comprise structural configurations.

CLAIM 53.   A system in accordance with claim 52, wherein:

said structural configurations are selected from a group comprising one or more of

a right anterior corner, a left anterior corner, a right posterior corner, a left posterior

corner, a fractional anterior cap, a fractional posterior cap, and a lengthwise strut across

top of band.

CLAIM 54.   A system in accordance with claim 47, wherein:

said cranial remodeling device information comprises a device type selection

selected form a group comprising a right side opening cranial remodeling band, a wide

right side opening cranial remodeling band, a left side opening cranial remodeling band,

and a wide left side opening cranial remodeling band.

CLAIM 55.   A system in accordance with claim 47, wherein:

said computer is operable to utilize said second data to automatically produce a

physical model of said desired shape.